## Adopted Levels, Gammas

| Type | Author | History Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | N. Nica | NDS 160, 1 (2019) | 21-Oct-2019 |

Q($\beta^-$)=4656 *10*; S(n)=4.53×10$^3$ *5*; S(p)=1.147×10$^4$ *11*; Q($\alpha$)=−3484 *20* 2017Wa10
S(2n)=11096 *5*; S(2p)=21952 *11* 2017Wa10

### $^{155}$Nd Levels

Cross Reference (XREF) Flags

A $^{252}$Cf SF decay

| E(level)† | J$^\pi$‡ | $T_{1/2}$ | XREF | Comments |
|---|---|---|---|---|
| 0.0@ | (3/2$^-$) | 8.9 s *2* | A | %$\beta^-$=100<br>J$^\pi$: tentative assignment of 2008Hw02 based on (3/2$^-$) for the g.s. of $^{153}$Nd and $^{155,157}$Sm.<br>$T_{1/2}$: from 1987Gr12, $\gamma$(t), K x ray(t). This value is also reported in other publications (1988GrZY,1990An31) from this group. Other: 9.5 s *7* (1986Ok08,1990Ok04). |
| 59.8# *3* | (5/2$^-$) | | A | |
| 135.8@ *3* | (7/2$^-$) | | A | |
| 230.7# *3* | (9/2$^-$) | | A | |
| 340.3@ *4* | (11/2$^-$) | | A | |
| 613.3@ *5* | (15/2$^-$) | | A | |
| 954.3@ *6* | (19/2$^-$) | | A | |
| 1361.8@ *7* | (23/2$^-$) | | A | |
| 1831.6@ *7* | (27/2$^-$) | | A | |

† From least-squares fit to E$\gamma$′s, assuming an uncertainty of 0.3 keV.
‡ Tentative assignment of 2008Hw02 based on the fact that the $\nu$3/2[521] rotational band in $^{153}$Nd has nearly identical transitions as this one in $^{155}$Nd.
# Band(A): $\nu$3/2[521], $\alpha$=+1/2.
@ Band(a): $\nu$3/2[521], $\alpha$=−1/2.

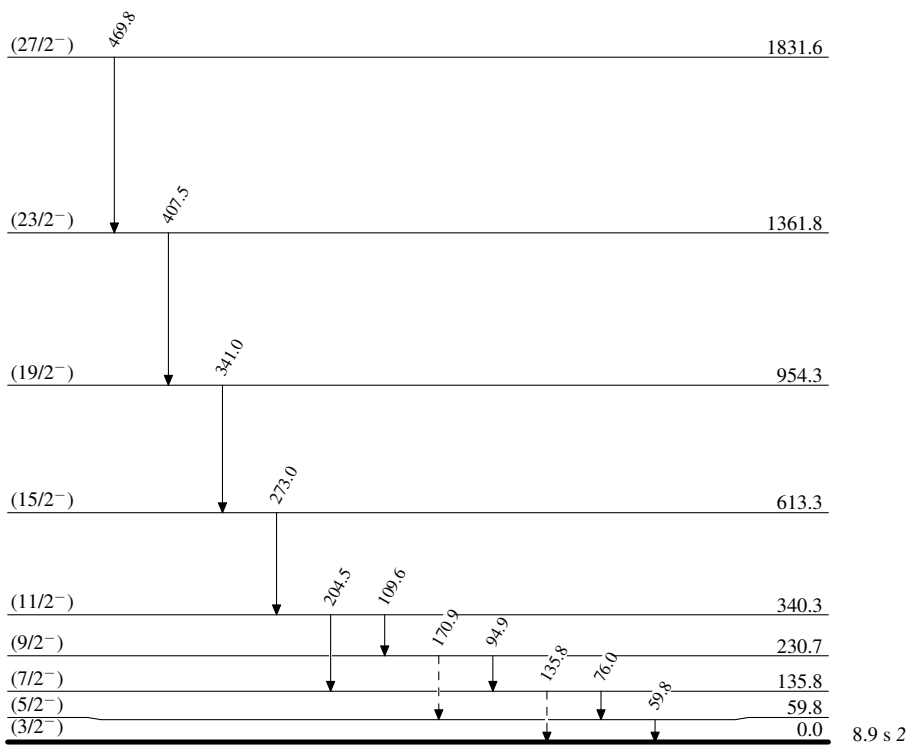
### $\gamma(^{155}Nd)$

| $E_i$(level) | $J_i^\pi$ | $E_\gamma$ | $E_f$ | $J_f^\pi$ | $E_i$(level) | $J_i^\pi$ | $E_\gamma$ | $E_f$ | $J_f^\pi$ |
|---|---|---|---|---|---|---|---|---|---|
| 59.8 | (5/2$^-$) | 59.8 | 0.0 | (3/2$^-$) | 340.3 | (11/2$^-$) | 204.5 | 135.8 | (7/2$^-$) |
| 135.8 | (7/2$^-$) | 76.0 | 59.8 | (5/2$^-$) | 613.3 | (15/2$^-$) | 273.0 | 340.3 | (11/2$^-$) |
| | | 135.8† | 0.0 | (3/2$^-$) | 954.3 | (19/2$^-$) | 341.0 | 613.3 | (15/2$^-$) |
| 230.7 | (9/2$^-$) | 94.9 | 135.8 | (7/2$^-$) | 1361.8 | (23/2$^-$) | 407.5 | 954.3 | (19/2$^-$) |
| | | 170.9† | 59.8 | (5/2$^-$) | 1831.6 | (27/2$^-$) | 469.8 | 1361.8 | (23/2$^-$) |
| 340.3 | (11/2$^-$) | 109.6 | 230.7 | (9/2$^-$) | | | | | |

† Placement of transition in the level scheme is uncertain.

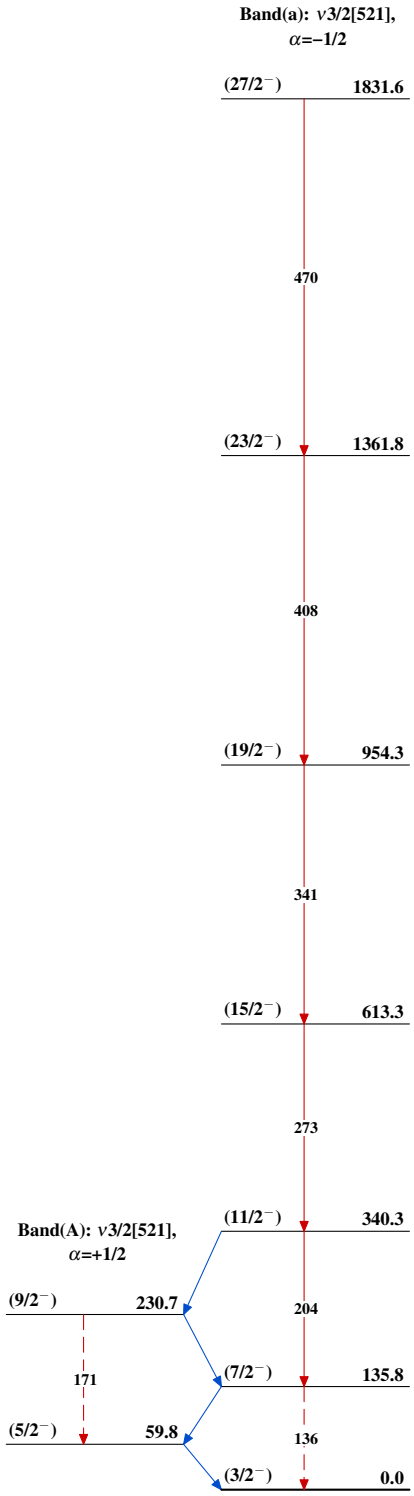
## Adopted Levels, Gammas

### Level Scheme




$^{155}_{60}Nd_{95}$

## Adopted Levels, Gammas




$^{155}_{60}Nd_{95}$